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EXAMINER	
STEVENS, THOMAS H	

ART UNIT	PAPER NUMBER
2123	

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/641,591	ROSEDALE, PHILIP	
	Examiner	Art Unit	
	Thomas H. Stevens	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-54 were examined.

Section I: Final Rejection

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-54 are rejected under 35 U.S.C. 102(b) as being disclosed by Rosenberg et al., (U.S. Patent 5,734,373 (1998)) (hereafter Rosenberg). Rosenberg discloses a method and apparatus for controlling and providing force feedback (column 28, lines 35-55) using an interface device manipulated by a user (abstract).

> Claim 1: An input system for use with a simulated environment, (column 17, lines 15-26) comprising: an immobilizing device (person would be immobile in race car: column 23, lines 25-44) which restricts the motion of a portion of a user's body; sensors (column 19, lines 8-32) which restricts the motion of a portion of a user's body; sensors (column 19, lines 8-32) which detect forces (column 28, lines 10-17) applied by the restricted portion of the user's body; a sensory feedback (column 28, lines 35-55) device which provides a sensation to the user corresponding to the motion which occurs in the simulated environment.

Claim 2: An input system as in Claim 1 (column 17, lines 15-26; column 19, lines 8-32; column 28, lines 35-55) respectively wherein the forces (column 28, lines 10-17) detected by the sensors (column 19, lines 8-32) are sent to the processing unit (column 25, lines 40-46) to determine the motion of the user in the simulated environment to which the sensations provided by the sensory feedback (column 28, lines 35-55) device will correspond.

Claim 3: An input system as in Claim 1 (column 17, lines 15-26; column 19, lines 8-32; column 28, lines 35-55) wherein the sensors (column 19, lines 8-32) comprise strain gauges (column 11, lines 16-20), which are disposed upon the immobilizing device (person would be immobile in race car: column 23, lines 25-44).

Claim 4: An input system as in Claim 1 (column 17, lines 15-26; column 19, lines 8-32; column 28, lines 35-55) wherein the sensory feedback (column 28, lines 35-55) device comprises at least one vibrating element, which is disposed substantially adjacent to a nerve spindle of a muscle of the restricted portion of the user's body (column 28, lines 10-15).

Claim 5: An input device as in Claim 1 (column 17, lines 15-26; column 19, lines 8-32; column 28, lines 35-55) wherein the sensory feedback (column 28, lines

35-55) device is used to provide a sensation of movement to the user when no actual movement (person would be immobile in race car: column 23, lines 25-40)of the type corresponding to the sensation occurs.

Claim 6: A method for providing feedback (column 28, lines 35-55) to a user of a processing unit (column 25, lines 40-46), comprising the steps of: providing an immobilizing device (person would be immobile in race car: column 23, lines 25-44) which holds a portion of the user's body immobile (person would be immobile in race car: column 23, lines 25-40); providing vibrating devices disposed upon the immobilizing device (person would be immobile in race car: column 23, lines 25-44) and positioned to touch the immobilized portion of the user's body near muscles which would extend if the immobilized portion of the user's body moved; sending signals from the processing unit (column 25, lines 40-46) to the vibrating devices to cause the vibrating devices to vibrate; controlling these signals such that the vibrating devices located near a particular muscle vibrate to provide feedback (column 28, lines 35-55) indicating that the immobilized portion of the user's body is moving .

Claim 7: A method as in Claim 6 (column 28, lines 35-55; column 25, lines 40-46; column 25, lines 40-46; column 28, lines 35-55) respectively wherein the signals sent to the vibrating devices by the processing unit (column 25, lines 40-46) are

controlled) based upon the forces (column 28, lines 10-17) exerted by the immobilized portion of the user's body against the immobilizing device (person would be immobile in race car: column 23, lines 25-44).

Claim 8: A method as in Claim 7 (column 28, lines 35-55; column 25, lines 40-46; column 25, lines 40-46; column 28, lines 35-55) wherein the forces (column 28, lines 10-17) exerted against the immobilizing device (person would be immobile in race car: column 23, lines 25-44) are measured using strain gauges (column 11, lines 16-20) disposed upon the immobilizing device (person would be immobile in race car: column 23, lines 25-44).

Claim 9: A method as in Claim 7 (column 28, lines 35-55; column 25, lines 40-46; column 25, lines 40-46; column 28, lines 35-55) wherein the signals are sent to the vibrating devices such that the feedback (column 28, lines 35-55) provided indicates to the user that the immobilized portion of the user's body (column 28, lines 10-15) is moving in the way it would have moved were it not immobilized.

Claim 10: An input system for a user comprising an immobilizing device (person would be immobile in race car: column 23, lines 25-44) which restricts the motion of a portion of the user's body a vibrating device disposed substantially adjacent to a nerve spindle of a muscle of the user's body which extends when the restricted portion of the user's body moves, (column 28, lines 10-15) and a

processing unit (column 25, lines 40-46) which sends signals to the vibrating devices to control the operation of the vibrating devices, the processing unit (column 25, lines 40-46) controlling the signals such that the vibrating devices located adjacent to a particular muscle provide feedback (column 28, lines 35-55) indicating that the restricted portion of the user's body is moving.

Claim 11: An input system as in Claim 10 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 25, lines 40-46) wherein the vibrating device comprises a signal generator adapted for connection to a body at a location such that it will affect the signal sent by the nerve spindle to the brain (column 28, lines 10-15).

Claim 12: An input system as Claim 10 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 25, lines 40-46) wherein the signals sent to the vibrating devices by the processing unit (column 25, lines 40-46) are controlled based upon the forces (column 28, lines 10-17) exerted by the immobilized portion of the user's body against the immobilizing device (person would be immobile in race car: column 23, lines 25-44).

Claim 13: An input system as in Claim 12 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 25, lines 40-46) wherein the forces (column 28, lines 10-17) exerted against the immobilizing device (person would be immobile in race car: column 23, lines 25-44) are measured

using strain gauges (column 11, lines 16-20) disposed upon the immobilizing device (person would be immobile in race car: column 23, lines 25-44).

Claim 14: An input system as in Claim 10 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 25, lines 40-46) wherein the signals are sent to the vibrating devices such that the feedback (column 28, lines 35-55) provided indicates to the user that the immobilized portion of the user's body is moving in the way it would have moved were it not immobilized.

Claim 15: A method for providing, an indication to a user that his body has moved when it has not, (duration parameter: column 4, line 32) comprising: preventing an intended motion of a portion of a user's body, (column 28, lines 10-15) wherein the portion of the user's body is substantially immobilized; and providing sensory feedback (column 28, lines 35-55) which is a reflection of the intended motion.

Claim 16: A method as in Claim 15 further comprising the step of immobilizing (person would be immobile in race car: column 23, lines 25-44) the portion of the user's body (column 28, lines 10-15).

Claim 17: A method as in Claim 15 wherein the sensory feedback (column 28, lines 35-55) comprises a vibration produced by a vibrating element placed against the user's body (column 28, lines 10-15).

Claim 18: A method as in Claim 17 wherein the sensory feedback (column 28, lines 35-55) provided suspends the feedback (column 28, lines 35-55) provided naturally by the user's body, which reflects the actual motion of the portion of the user's body (column 28, lines 10-15).

Claim 19: A method as in Claim 16 wherein the step of immobilizing a portion of the user's body further comprises attaching the portion of the user's body to a rigid structure so as to restrict the motion of the portion of the user's body (person would be immobile in race car: column 23, lines 25-44).

Claim 20: A method as in Claim 19, wherein the step of detecting the intended motion (column 28, lines 10-15) comprises measuring the force applied against the rigid structure by the immobilized (person would be immobile in race car: column 23, lines 25-44) portion of the user's body.

Claim 21: A method as in Claim 20 wherein the force applied against the rigid structure is measured by using strain gauges (column 11, lines 16-20) to detect the deflection of the structure due to the force applied against it.

Claim 22: A method as in Claim 15 wherein the step of detecting the intended motion comprises measuring the direction and magnitude (column 30, lines 21-46) of the forces (column 28, lines 10-17) applied by the immobilized portion of the user's body (column 28, lines 10-15).

Claim 23: An input system for use with a simulator, comprising an immobilizing device (person would be immobile in race car: column 23, lines 25-44) a processing unit (column 25, lines 40-46) , and an output (column 3, lines 3-47) system the immobilizing device (person would be immobile in race car: column 23, lines 25-44) holding the head of a user in a substantially fixed position with respect to the user's torso and further comprising sensors (column 19, lines 8-32) to detect a force exerted by the user in attempting to move the user's head, (column 28, lines 10-15) and the processing unit (column 25, lines 40-46) calculating the effect of the force applied by the user in a simulated environment and presenting this effect in the simulated environment to the user via the output (column 3, lines 3-47) system.

Claim 24: An input system as in Claim 23 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) wherein the output (column 3, lines 3-47) system corresponds to a remotely operated physical device: (column 31,lines 38-54) which is operated according to the input

system and which is controlled through the processing unit (column 25, lines 40-46) and represented in the simulated environment .

Claim 25: An input system as in Claim 23 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) further comprising vibration devices, the vibration devices touching the user within the immobilizing device (person would be immobile in race car: column 23, lines 25-44) and being controlled by the processing unit (column 25, lines 40-46) to provide sensations for the user which mimic the sensations which would be felt during motion of the immobilized portion of the user's body as it moves in the simulated environment (column 30, lines 21-46).

Claim 26: An input system as in Claim 23 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) wherein the processing unit (column 25, lines 40-46) is programmed to use a physical model for the simulated environment, (column 29, lines 40-57) which provides passive feedback (column 28, lines 35-55) by immobilizing the user the user applies force against the immobilizing device (person would be immobile in race car: column 23, lines 25-44) in a manner, which reflects the forces (column 28, lines 10-17), which would be applied to the user in the simulated environment.

Claim 27. An input system as in Claim 23 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) wherein the immobilizing input device comprises a securement device within which the user places his head and which is rigidly attached to a seat upon which the user sits during use of the input system (person would be immobile in race car: column 23, lines 25-44).

Claim 28: An input system as in Claim 27, (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) wherein the securement device comprises a helmet (inherent since race car drivers have helmets: column 30, lines 21-26).

Claim 29: An input system as in Claim 27, (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) wherein the securement device comprises a stiff headband (inherent since race car drivers have helmets: column 30, lines 21-26; questionable patentable weight).

Claim 30: An input system as in Claim 27 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) wherein the securement device comprises a pair of substantially semi-circular braces, (person would be immobile in race car: column 23, lines 25-44) one of which is placed upon the rear of the user's head and the other of which is fit snugly to the

front of the user's head above the eyes and about the temples (column 28, lines 10-15).

Claim 31: An input system as in Claim 27 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) wherein the securement device is attached to the seat (person would be immobile in race car: column 23, lines 25-44) of the system using at least one support member (column 28, lines 10-15).

Claim 32: An input system as in Claim 31 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) wherein the sensors (column 19, lines 8-32) are disposed upon the support member (column 28, lines 10-15).

Claim 34: An input system as in Claim 33 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) wherein the sensors (column 19, lines 8-32) are disposed in two sets of opposing pairs on each support member (column 28, lines 10-15).

Claim 33: An input system as in Claim 23 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) wherein

the sensors (column 19, lines 8-32) comprise strain gauges (column 11, lines 16-20).

Claim 35: An input system as in Claim 23 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) further comprising at least one additional immobilizing device (person would be immobile in race car: column 23, lines 25-44) which holds an arm of the user from the elbow to the hand in a substantially fixed position with respect to the torso of the user and which further comprises sensors (column 19, lines 8-32) disposed so as to measure the forces (column 28, lines 10-17) exerted by the arm of the user at least at a point near the elbow of the user and at a point near the wrist of the user (column 28, lines 10-15).

Claim 36: An input system as in Claim 23 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) wherein the additional immobilizing device (person would be immobile in race car: column 23, lines 25-44) detects the forces (column 28, lines 10-17) exerted by the user in attempting to move his arm and sends this information to the processing unit (column 25, lines 40-46).

Claim 37: An input system as in Claim 23 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) further

comprising at least one additional immobilizing device (person would be immobile in race car: column 23, lines 25-44) which holds a leg of the user from the knee to the foot in a substantially fixed position with respect to his torso and which further comprises pressure sensors (column 19, lines 8-32) disposed so as to measure the forces (column 28, lines 10-17) exerted by the leg of the user at least at a point near the knee of the user and at a point near the ankle of the user (impact of simulated car crash would affect all body parts: column 23, lines 25-40).

Claim 38: An input system as in Claim 37 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32; impact of simulated car crash would affect all body parts: column 23, lines 25-40) wherein the additional immobilizing device (person would be immobile in race car: column 23, lines 25-44) detects the forces (column 28, lines 10-17) exerted by the user in attempting to move his leg and sends this information to the processing unit (column 25, lines 40-46).

Claim 39: An input system as in Claim 23 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) wherein the visual display (column 22, lines 30-36) of the output (column 3, lines 3-47) system fills substantially all of the visual field of view of the user when the user's head is immobilized within the input system.

Claim 40: An input system as in Claim 39 wherein the visual display (column 22, lines 30-36) comprises a screen which is positioned between the user's head and a projection system located on the opposite side of the screen as the user's head.

Claim 41: An input system as in Claim 23 (person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) wherein additional input signals are sent to the processing unit (column 25, lines 40-46) by an additional input device disposed upon the immobilizing device (person would be immobile in race car: column 23, lines 25-44).

Claim 42: An input system as in Claim 41(person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) wherein the additional input device comprises a gun handle and trigger (equivocate trigger with yoke: column 2841-60).

Claim 43: An input system as in Claim 41(person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) wherein the additional input device comprises *one or more buttons (column 16, lines 38-42) (questionable patentable weight)*.

Claim 44: An input system as in Claim 41(person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-15; column 19, lines 8-32) wherein the additional input device comprises a joystick (column 28, lines 41-56).

Claim 45: An input system for use with a computer (column 22, lines 30-36; and column 29, lines 40-56) comprising at least one immobilizing device (person would be immobile in race car: column 23, lines 25-44) which holds a portion of the body of a user of the system in a substantially fixed position, the immobilizing device (person would be immobile in race car: column 23, lines 25-44) comprising sensors (column 19, lines 8-32) and vibration devices, the sensors (column 19, lines 8-32) being configured to detect forces (column 28, lines 10-17) exerted by the user in attempting to move the portion of the body held by the immobilizing device (person would be immobile in race car: column 23, lines 25-44), the sensors (column 19, lines 8-32) sending signals representing the magnitude and direction of these forces (column 28, lines 10-17) to the computer (column 22, lines 30-36; and column 29, lines 40-56), and the vibration devices disposed upon the muscles of the user and controlled by the computer (column 22, lines 30-36; and column 29, lines 40-56) so as to provide sensations which mimic the sensations which would be felt if the attempted motion had occurred.

Claim 46: An input system as in Claim 45 (column 22, lines 30-36; and column 29, lines 40-56; person would be immobile in race car: column 23, lines 25-44;

column 28, lines 10-17; column 19, lines 8-32; column 22, lines 30-36; and column 29, lines 40-56) further comprising a movable frame which is connected to the computer (column 22, lines 30-36; and column 29, lines 40-56) and actuators which are capable of moving the frame, wherein the user and the immobilizing device (person would be immobile in race car: column 23, lines 25-44) are located within the frame, and the actuators are controlled by the computer(column 22, lines 30-36; and column 29, lines 40-56) so as to coordinate the motion of the frame to provide motion feedback (column 28, lines 35-55) to the user of the system.

Claim 47: An input system as in Claim 45 (column 22, lines 30-36; and column 29, lines 40-56; person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-17; column 19, lines 8-32; column 22, lines 30-36; and column 29, lines 40-56) wherein the head of the user is immobilized with respect to the torso of the user by the immobilizing device (person would be immobile in race car: column 23, lines 25-44) and further comprising a visual display (column 22, lines 30-36) disposed in fixed relation to the user's head, the display (column 22, lines 30-36) connected to the computer (column 22, lines 30-36; and column 29, lines 40-56) and configured to provide visual feedback (column 28, lines 35-55) to the user of the system.

Claim 48: An input system as in Claim 47 (column 22, lines 30-36; and column 29, lines 40-56; person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-17; column 19, lines 8-32; column 22, lines 30-36; and column 29, lines 40-56) wherein the visual feedback (column 28, lines 35-55) provided encourages the user to apply forces (column 28, lines 10-17) to the immobilizing device (person would be immobile in race car: column 23, lines 25-44) in order to control the visual display (column 22, lines 30-36).

Claim 49: An input system as in Claim 45 (column 22, lines 30-36; and column 29, lines 40-56; person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-17; column 19, lines 8-32; column 22, lines 30-36; and column 29, lines 40-56)wherein the input system is used to control a physical device, which is connected to the computer (column 22, lines 30-36; and column 29, lines 40-56).

Claim 50: An input system as in Claim 49 (column 22, lines 30-36; and column 29, lines 40-56; person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-17; column 19, lines 8-32; column 22, lines 30-36; and column 29, lines 40-56) wherein the physical device comprises a remotely operated machine.

Claim 51: An input system as in Claim 49 (column 22, lines 30-36; and column 29, lines 40-56; person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-17; column 19, lines 8-32; column 22, lines 30-36; and column 29, lines 40-56) wherein the computer(column 22, lines 30-36; and column 29, lines 40-56) controls the vibration devices to provide feedback (column 28, lines 35-55) to the user which is based upon the motion of the physical device.

Claim 52: A method for a user to control an environment simulated on a computer(column 22, lines 30-36; and column 29, lines 40-56) system where the user is modeled within the simulated environment, comprising: providing at least one immobilizing device (person would be immobile in race car: column 23, lines 25-44) which restricts the motion of at least a portion of the user's body; detecting the forces (column 28, lines 10-17) exerted by the immobilized portion of the user's body against the immobilizing device (person would be immobile in race car: column 23, lines 25-44); sending a signal representing these forces (column 28, lines 10-17) to the computer(column 22, lines 30-36; and column 29, lines 40-56) system; and determining the effect that these forces (column 28, lines 10-17) have upon the model of the user in the environment simulated by the computer(column 22, lines 30-36; and column 29, lines 40-56).

Claim 53: A method as in Claim 52 (column 22, lines 30-36; and column 29, lines 40-56; person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-17; column 19, lines 8-32; column 22, lines 30-36; and column 29, lines 40-56)wherein forces (column 28, lines 10-17) exerted by the immobilized portion of the user's body are detected by measuring the deflection of the immobilizing device (person would be immobile in race car: column 23, lines 25-44).

Claim 54: A method as in Claim 53 (column 22, lines 30-36; and column 29, lines 40-56; person would be immobile in race car: column 23, lines 25-44; column 28, lines 10-17; column 19, lines 8-32; column 22, lines 30-36; and column 29, lines 40-56) wherein the deflection of the immobilizing device (person would be immobile in race car: column 23, lines 25-44) is measured using strain gauges (column 11, lines 16-20) disposed upon the immobilizing device (person would be immobile in race car: column 23, lines 25-44).

Section II: Response to Applicants' Arguments (3rd Office Action)

Denial Request for Examiner Interview

4. Applicants are thanked for addressing this issue. However, the examiner did contact Mr. Rose via voice message on 5/10/05 respectfully rejecting the request for an interview. Mr. Rose wanted the examiner's thought process behind the rejection in which the examiner simply stated, via telephone 5/10/05, that every claim limitation was investigated based on its scope. The examiner restated that an interview was

completed based on the first office action and that time was limited based on the current backlog of cases. Furthermore, current response by applicants mimics the issues submitted on the PTO 413A, thus, an interview at this stage is redundant and immaterial at present since the art used in the last office action is now negated Request is respectfully denied.

112 2nd

5. Applicants are thanked for addressing this issue. Rejections are withdrawn.

103(a)

6. Applicants are thanked for addressing this issue. Applicant's arguments, see pages 4-19, filed 7/22/05, with respect to the rejection(s) of claim(s) 1-54 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of by Rosenberg et al., (U.S. Patent 5,734,373 (1998)).

Prior Art Citied

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- US Patent 5,734,373 (1998)
- US Patent 6,281,651 (2001)
- US Patent 5,803,738 (1998)
- US Patent 6,496,200 (2002)
-

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715, Monday-Friday (8:00 am- 4:30 pm EST).

If attempts to reach the examiner by telephone are unsuccessful, contact examiner's supervisor Mr. Leo Picard ((571) 272-3749). The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov.. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) (toll-free (866-217-9197)).

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Art Unit 2125

Date

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